

REMARKS

Review and reconsideration of the non-final Office Action mailed January 30, 2009 (the "Office Action"), is respectfully requested in view of the following remarks. At the time of the Office Action, claims 1-35 were pending, with claims 1-23 and 30-35 being drawn to an elected invention. All claims were rejected under one or more of 35 U.S.C. §102 and 35 U.S.C. §103(a).

By this Amendment, claims 1 & 4 are amended and claims 2, 3, 5, and 6 are canceled. Support for the subject matter of amended claim 1 can be found throughout the specification. *See, e.g.*, Specification, Page 7, ln. 18 to Page 9, ln. 12; Cancelled claims 2, 3, 5 & 6. No new matter is added.

The amendments presented herein have been made solely to expedite prosecution of the instant application to allowance and should not be construed as an indication of Applicants' agreement with or acquiescence to the Examiner's position. Accordingly, Applicants expressly maintain the right to pursue broader subject matter through subsequent amendments, continuation or divisional applications, reexamination or reissue proceedings, and all other available means. The amendments and rejections are addressed below in more detail.

Restriction Requirement

The Office Action includes a Restriction Requirement. The Restriction Requirement asserts that the following inventions lack unity of invention:

Group I: Claims 1-23 and 30-35, drawn to a method; and

Group II: Claims 24-29, drawn to a product.

Applicants expressly take no position on the correctness of the Restriction Requirement. However, Applicants confirm the election of Group I, claims 1-23 and 30-35, drawn to a process, because of the administrative requirement than an election be made under 37 C.F.R. § 1.142; MPEP § 818.03(b). Accordingly, claims 24-29 are withdrawn.

Claim Rejection - 35 U.S.C. §102

Claims 1, 3-7 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,421,901 issued to Migdol *et al.* (hereinafter "Migdol"). Prior to addressing the cited references, Applicants wish to review the subject matter of amended claim 1, which is drawn to:

1. (Currently amended) A method of extracting volatile components by which volatile components are obtained by steam extraction of tasty materials, the method comprising:
directing steam into contact with the tasty material; and
recovering the steam after said directing steam into contact, wherein the steam extraction is carried out using super heated steam that is set to a temperature higher than 140°C but no higher than 500°C, wherein a steam flow rate of 0.3 to 30 kg/hr is used per 1 kg of tasty material, wherein said directing step is carried out for 5 to 60 minutes, and wherein a recovery rate of the volatile components by the steam extraction is 0.01 to 10% by weight as a solid with respect to the tasty material.

Amended claim 1 is drawn to a method of extracting volatile components obtained by steam extraction from tasty materials. The method includes directing steam into contact with the tasty material; and recovering the steam after said directing steam into contact. The steam extraction is carried out using super heated steam that is set to a temperature higher than 140°C but no higher than 500°C and the steam flow rate is 0.3 to 30 kg/hr per 1 kg of tasty material. The directing step is carried out for 5 to 60 minutes and the recovery rate of the volatile components by the steam extraction is 0.01 to 10% by weight as a solid with respect to the tasty material.

Migdol disclose vapors that exit from the bed of coffee at a temperature of between 180 to 230°F (82 to 110°C). However, Migdol fails to disclose or suggest using the claimed super heated steam under the claimed specific conditions, including a temperature higher than 140°C but no higher than 500°C, and the claimed recovery rate of the volatile components. Accordingly, Applicants respectfully request that the rejection based on Migdol be withdrawn.

Claims 1-5, 7-8 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,417,993 issued to Takano *et al.* (hereinafter "Takano"). Takano is not used to reject the subject matter of claim 6. Amended claim 1 includes all limitations of claim 6. Accordingly, Takano fails to disclose or suggest the claimed super heated steam under the claimed specific conditions and the claimed recovery rate, and Applicants respectfully request that the rejection based on Takano be withdrawn.

Claims 1, 7-8 and 14-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Japanese Patent Publication 2003-033137 to Kazuyuki *et al.* (hereinafter “Kazuyuki”). Kazuyuki discloses extracting volatile components by steam distillation and obtaining the volatile components after steaming. However, Kazuyuki is not used to reject the subject matter of claims 3 and 6, which are included in amended claim 1. Accordingly, Kazuyuki fails to disclose or suggest the claimed superheated steam under the claimed specific conditions and the claimed recovery rate, and Applicants respectfully request that the rejection based on Kazuyuki be withdrawn.

Claim Rejection - 35 U.S.C. §103

Claims 6, 9-12 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takano in view of U.S. Patent No. 5,681,607 issued to Maki *et al.* (hereinafter “Maki”) and U.S. Patent No. 4,586,453 issued to Morrison, Jr., *et al.* (hereinafter “Morrison”).

Takano is drawn to a method of producing coffee aroma component by introducing a mixture of an inert gas and vapor from an aqueous solution containing 10 to 80% by weight of ethanol to *coffee beans that have already been roasted and milled*. Takano at Col. 4, ln. 51-59. In contrast, Maki discloses a process of *roasting green coffee beans* with superheated steam where the steam is set to a temperature from 251 to 400°C. However, Maki fails to disclose or suggest using the claimed super heated steam under the claimed specific conditions and the claimed recovery rate.

Furthermore, a person of ordinary skill in the would understand that the settings and considerations used to roast green coffee beans, as in Maki, are completely different from those used to extract flavor from coffee beans that have already been milled and roasted, as in Takano. The roasting process is used to develop the flavor within the coffee beans and prevent extraction of the flavor compounds. Maki at Col. 1, ln. 20-25.

With respect to the relevant disclosures regarding extraction, Maki discloses an extraction process that utilizes boiling water to extract flavor compounds from the green beans after they are roasted and milled. Maki at Col. 6, ln. 21-25. Takano is drawn to a process for extracting flavor from the beans that have already been roasted and milled using an aqueous ethanol vapor at a temperature from 80 to 120°C. Takano at Col. 4, ln. 53-59. Thus, if one of skill in the art were to combine Takano and Maki, such a person would rely on Maki’s extraction disclosure, *i.e.*, using boiling water, rather

than the roasting disclosure cited by the Examiner. Accordingly, the combination of Takano and Maki fails to disclose or suggest the claimed superheated steam under the claimed specific conditions and the claimed recovery rate and fails to render the claimed subject matter unpatentable.

Morrison discloses a steam flow rate of about 0.14 to about 0.32 lbs/hr per lbs dry coffee beans for about 7 minutes. This means the flow rate of about 0.13 kg/hr to 0.33 kg/hr per 1 kg dry beans. However, Morrison fails to correct the deficiencies of Takano and Maki described above. Accordingly, Applicants respectfully request that the rejection based on the combination of Takano, Maki and Morrison be withdrawn.

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takano in view of U.S. Patent No. 5,417,993 issued to Kino *et al.* (hereinafter "Kino"). Kino is drawn a method for producing drinks filled in containers that is characterized in that the containers are made to have a nitrogen gas atmosphere to be in a substantially deoxygenated condition prior to being filled with drinks. Kino, Abstract.

As noted above, Takano fails to disclose or suggest a steam extraction process where the steam extraction is carried out using super heated steam that is set to a temperature higher than 140°C but no higher than 500°C, *i.e.*, Takano is not asserted against claim 6. In addition, Kino addresses coffee drinks that are made using "water, warm water, hot water, boiling water or steam falling between 0 and 130°C." Kino at Col. 5, ln. 21-33. Furthermore, the sealed containers of Kino do not disclose or suggest the claimed steam flow rate. Clearly, neither of the cited references, whether alone or in combination, disclose or suggest the claimed superheated steam under the claimed specific conditions and the claimed recovery rate. Accordingly, Applicants request that the rejection based on the combination of Takano and Kino be withdrawn.

Claims 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takano in view of Midgol and Kazuyuki. As noted above, the combination of Takano and Midgol do not disclose or suggest the claimed superheated steam under the claimed specific conditions and the claimed recovery rate. Kazuyuki utilizes a distillation extraction process at a temperature ranging from 40-100°C. Kazuyuki, Paragraph [0022]. As Kazuyuki also fails to correct the deficiencies identified above, Applicants respectfully request that the rejection based on the combination of Takano, Midgol and Kazuyuki be withdrawn.

Conclusion

For at least the reasons set forth above, the independent claims are believed to be allowable. In addition, the dependent claims are believed to be allowable due to their dependence on an allowable base claim and for further features recited therein. The application is believed to be in condition for immediate allowance. If any issues remain outstanding, Applicant invites the Examiner to call the undersigned (561-838-5229 x228) if it is believed that a telephone interview would expedite the prosecution of the application to an allowance.

Respectfully submitted,

NOVAK DRUCE + QUIGG LLP



Gregory A. Nelson, Reg. No. 30,577
Gregory M. Lefkowitz, Reg. No. 56,216
City Place Tower
525 Okeechobee Blvd., Fifteenth Floor
West Palm Beach, FL 33401
(561) 838-5229

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